What is claimed is:

1. A somatostatin polypeptide or bioactive analog or subunit thereof, the somatostatin polypeptide comprising at least one amino acid sequence comprising at least one of a portion of *Oncorhynchus mykiss* preprosomatostatin I (PPSS-I; SEQ ID NO:3) and a portion of *Oncorhynchus mykiss* preprosomatostatin II" (PPSS-II"; SEQ ID NO:9).

2. The somatostatin polypeptide or bioactive analog or subunit thereof of claim 1, wherein the somatostatin polypeptide comprises at least one amino acid sequence selected from the group consisting of SEQ ID NOs:1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 15, 17, 18, and 19.

3. A polypeptide comprising at least one amino acid sequence selected from the group consisting of SEQ ID NOs:3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 15, 17, 18, and 19.

4. A polynucleotide comprising at least one nucleotide sequence that encodes at least one somatostatin polypeptide or bioactive analog or subunit thereof of claim 1.

5. The polynucleotide of claim 4 comprising SEQ ID NO:8 or SEQ ID NO:20.

6. A polynucleotide that is substantially complementary to the polynucleotide of claim 4.

7. A method for identifying a modified somatostatin polypeptide comprising:

(a) providing an amino acid sequence of a somatostatin polypeptide comprising at least one amino acid sequence selected from the group consisting of SEQ ID NOs:3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 15, 17, 18, and 19;

(b) aligning the amino acid sequence of the somatostatin polypeptide of step(a) with the amino acid sequence of a reference somatostatin polypeptide;

(c) identifying at least one site or region of differing amino acid sequence; and

(d) modifying the amino acid sequence of the somatostatin polypeptide of step (a) or the reference somatostatin polypeptide at the identified site or region to incorporate at least one amino acid substitution, insertion, or deletion from the analogous site or region in the other somatostatin polypeptide to yield the amino acid sequence of a modified somatostatin polypeptide.

8. The method of claim 7 further comprising (e) synthesizing the modified somatostatin polypeptide and (f) assaying the modified somatostatin polypeptide for biological activity.

9. The method of claim 8 wherein step (e) comprises assaying the binding of the modified somatostatin polypeptide to a human somatostatin receptor.

10. The method of claim 7 wherein the reference somatostatin polypeptide is a mammalian somatostatin polypeptide.

11. The method of claim 7 wherein the modified somatostatin polypeptide is a somatostatin agonist or antagonist.

12. A fusion polypeptide comprising an N-terminal somatostatin region comprising at least one first amino acid sequence comprising at least one of a portion of *O. mykiss* preprosomatostatin I (PPSS-I; SEQ ID NO:3) and a portion of *O. mykiss* preprosomatostatin II" (PPSS-II"; SEQ ID NO:9) covalently linked to a C-terminal region comprising a second amino acid sequence.

13. The fusion polypeptide of claim 12 wherein the second amino acid sequence encodes a bioactive moiety.

14. The fusion polypeptide of claim 12 wherein the first amino acid sequence comprises at least one amino acid sequence selected from the group consisting of NOs:3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 15, 17, 18, and 19.

15. The fusion polypeptide of claim 13 wherein the first amino acid sequence comprises SEQ ID NO:6 or SEQ ID NO:18.